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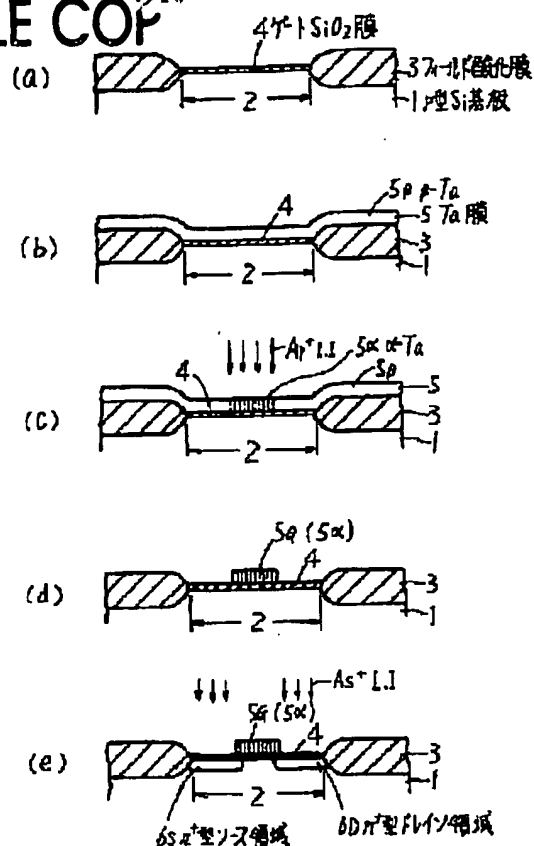
APPLICATION DATE : 10-02-94  
APPLICATION NUMBER : 06015638

APPLICANT : FUJITSU LTD;

INVENTOR : NAKAISHI MASAFUMI;

INT.CL. : H01L 29/78 H01L 29/43

TITLE : SEMICONDUCTOR DEVICE AND  
MANUFACTURE THEREOF



ABSTRACT : PURPOSE: To improve the operating speed of a semiconductor device of a MIS structure and to improve the evenness of the characteristics of the device.

CONSTITUTION: A method of manufacturing a semiconductor device of a MIS structure has a process wherein a gate electrode 5G is formed into a structure consisting of an  $\alpha$ -Ta film 5 $\alpha$ , the gate electrode is formed into a structure consisting of a laminated film of a TiN film and an  $\alpha$ -Ta film, a gate insulating film consists of a poly-crystalline SiC film and the gate electrode is formed into a structure consisting of an  $\alpha$ -Ta film, a region only, which consists of a  $\beta$ -Ta film formed by sputtering, of the gate electrode is selectively formed into an  $\alpha$ -Ta film and an  $\alpha$ -Ta gate electrode is patterned from the above  $\alpha$ -Ta film using a etching selectively between the  $\alpha$ -Ta film and the  $\beta$ -Ta film.

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